

Pergolizzi et al.  
Serial No.: 08/479/995  
Filing Date: June 7, 1995  
Page 4 (Preliminary Amendment - March 5, 1996)

Page 50, line 5, change "37:1389" to -- 37:684-691 -- .

Page 51, line 24 (under "Example 20"), change "lyophylized" to -- lyophilized -- .

Page 52, line 6, after the first word in the line "The" and before "coupled"  
change "Streptavidin" to -- streptavidin -- .

Page 54, line 9, after "chromatographed on" and before "wx (H<sup>+</sup>)+"  
change "Dowex 50" to -- Dowex® 50 -- .

Page 56, line 26 (last line), before "DNA was" change "amine-substituted"  
to -- amine-substituted -- .

In the Claims:

Cancel claim 1 (claims 2-149 having been previously cancelled by the continuation request).

Add new claims 150-282 as follows:

-- 150. (NEW) A composition of matter comprising:

a molecular bridging entity comprising a first portion capable of recognizing and binding to a molecularly recognizable portion on an analyte, and a second portion comprising a nucleic acid; and

a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity nucleic acid second portion, and a signal generating portion capable of providing a detectable signal. --

-- 151. (NEW) The composition according to claim 150, wherein said analyte comprises a biological system. --

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-- 152. (NEW) The composition according to claim 151, wherein said biological system comprises at least one member selected from the group consisting of a virus or a viral component thereof, and a cell or a cellular component thereof. --

-- 153. (NEW) The composition according to claim 152, wherein said cell or component thereof comprises a bacterium or a bacterial component thereof. --

-- 154. (NEW) The composition according to claim 151, wherein said biological system comprises a pathogen or a component thereof. --

-- 155. (NEW) The composition according to claim 150, wherein said analytes selected from the group consisting of a nucleic acid and a protein. --

-- 156. (NEW) The composition according to claim 155, wherein said nucleic acid is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 157. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion comprises a low molecular weight organic compound. --

-- 158. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of an antigen and an antibody. --

-- 159. (NEW) The composition according to claim 158, wherein said antibody comprises a polyclonal or a monoclonal antibody. --

-- 160. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of a saccharide and a lectin. --

-- 161. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of a hormone and a receptor therefor. --

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-- 162. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of an enzyme, an allosteric effector, an enzyme substrate and an enzyme cofactor. --

-- 163. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of a ligand and a receptor therefor. --

-- 164. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion is selected from the group consisting of a protein and a protein receptor therefor. --

-- 165. (NEW) The composition according to claim 150, wherein said molecular bridging recognizing first portion comprises a nucleic acid. --

-- 166. (NEW) The composition according to claim 165, wherein said nucleic acid comprises an oligo- or polynucleotide. --

-- 167. (NEW) The composition according to claim 166, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 168. (NEW) The composition according to claim 166, wherein said oligo- or polynucleotide is single-stranded or partially double-stranded. --

-- 169. (NEW) The composition according to claim 166, wherein said oligo- or polynucleotide is circular or linear. --

-- 170. (NEW) The composition according to claim 166, wherein said oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 171. (NEW) The composition according to claim 150, wherein said nucleic acid in the molecular bridging entity second portion comprises an oligo- or polynucleotide. --

-- 172. (NEW) The composition according to claim 171, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 173. (NEW) The composition according to claim 150, wherein said nucleic acid in the molecular bridging entity second portion is single-stranded or partially double-stranded. --

-- 174. (NEW) The composition according to claim 150, wherein said nucleic acid sequence in the molecular bridging entity second portion is linear or circular. --

-- 175. (NEW) The composition according to claim 171, wherein said oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 176. (NEW) The composition according to claim 150, wherein said nucleic acid in the molecular bridging entity second portion is derived from a phage selected from the group consisting of a T even phage, a filamentous phage, an M13 phage, or an M13 phage variant. --

-- 177. (NEW) The composition according to claim 150, wherein said molecular bridging entity second portion comprises a nucleic acid sequence of repeating low complexity. --

-- 178. (NEW) The composition according to claim 177, wherein said nucleic acid sequence of repeating low complexity is selected from the group consisting of a poly G or polydeoxy G, poly GT or polydeoxy GT, poly C or polydeoxy C, poly T or polydeoxy T, poly A or polydeoxy A, poly CA or polydeoxy CA, poly GA or polydeoxy GA, poly GAT or polydeoxy GAT, and poly GTA or polydeoxy GTA. --

-- 179. (NEW) The composition according to claim 166, wherein said molecular bridging entity first portion and said molecular bridging entity nucleic acid second portion are incapable of hybridizing to identical oligo- or polynucleotide sequences. --

-- 180. (NEW) The composition according to claim 150, wherein said signalling entity nucleic acid portion comprises an oligo- or polynucleotide. --

-- 181. (NEW) The composition according to claim 180, wherein said signalling entity oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 182. (NEW) The composition according to claim 180, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 183. (NEW) The composition according to claim 150, wherein said signalling entity nucleic acid portion is single-stranded or partially double-stranded. --

-- 184. (NEW) The composition according to claim 150, wherein said signalling entity nucleic acid portion is linear or circular. --

-- 185. (NEW) The composition according to claim 184, wherein said signalling entity nucleic acid portion is a polymer derived from a circular nucleic acid molecule covalently attached to a signal generating portion or a signalling chemical moiety. --

-- 186. (NEW) The composition according to claim 150, wherein said signalling entity nucleic acid portion is derived from a phage selected from the group consisting of a T even phage, a filamentous phage, and an M13 phage, or an M13 phage variant. --

-- 187. (NEW) The composition according to claim 186, wherein said signalling entity modified oligo- or polynucleotide comprises a naturally occurring modified oligo- or polynucleotide. --

-- 188. (NEW) The composition according to claim 187, wherein said signalling entity modified oligo- or polynucleotide carries a cloned insert. --

-- 189. (NEW) The composition according to claim 150, wherein said signalling entity nucleic acid portion comprises a nucleic acid sequence of repeating low complexity. --

-- 190. (NEW) The composition according to claim 189, wherein said nucleic acid sequence of repeating low complexity is selected from the group consisting of a poly G or polydeoxy G, poly GT or polydeoxy GT, poly C or polydeoxy C, poly T or polydeoxy T, poly A or polydeoxy A, poly CA or polydeoxy CA, poly GA or polydeoxy GA, poly GAT or polydeoxy GAT, and poly GTA or polydeoxy GTA. --

-- 191. (NEW) The composition according to claim 150, wherein said signal generating portion is capable of directly providing a detectable signal. --

-- 192. (NEW) The composition according to claim 191, wherein said direct signal providing signal generating portion comprises a radioactive compound. --

-- 193. (NEW) The composition according to claim 191, wherein said direct signal providing signal generating portion is selected from the group consisting of a fluorogenic compound, a phosphorescent compound, a chromogenic compound, a chemiluminescent compound and an electron dense compound. --

-- 194. (NEW) The composition according to claim 191, wherein said direct signal providing signal generating portion comprises an enzyme. --

-- 195. (NEW) The composition according to claim 150, wherein said signal generating portion is indirectly capable of providing a detectable signal. --

-- 196. (NEW) The composition according to claim 195, wherein said indirect signal providing signal generating portion is selected from the group consisting of an antibody, an antigen, a hapten, a receptor, a ligand and an enzyme. --

-- 197. (NEW) The composition according to claim 195, wherein said indirect signal providing signal generating portion comprises a polynucleotide sequence capable of recognizing a signal-containing moiety. --

-- 198. (NEW) The composition according to claim 195, wherein said indirect signal providing signal generating portion comprises a compound capable of binding to an insoluble phase. --

-- 199. (NEW) The composition according to claim 150, wherein said signal generating portion is capable of being detected by a member selected from the group consisting of an enzymatic measurement, a fluorescent measurement, a phosphorescent measurement, a chemiluminescent measurement, a calorimetric measurement, a microscopic measurement, an electron density measurement, a radioactive measurement and a binding step on an insoluble phase. --

-- 200. (NEW) The composition according to claim 150, wherein the molecular bridging entity or the analyte is immobilized. --

-- 201. (NEW) A composition of matter comprising:

- (a) a sample containing an analyte having a molecularly recognizable portion thereon and other non-target analytes;
- (b) a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable analyte portion and a second portion comprising a nucleic acid; and
- (c) a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity nucleic acid second portion, and a signal generating portion capable of providing a detectable signal. --

-- 202. (NEW) A composition of matter comprising:

a detectable complex which comprises:

- (a) an analyte having a molecularly recognizable portion thereon;
- (b) a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable analyte portion and a second portion comprising a nucleic acid; and
- (c) a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity nucleic acid second portion, and a signal generating portion capable of providing a detectable signal. --

-- 203. (NEW) The composition according to claims 201 or 202, wherein said analyte comprises a biological system. --

-- 204. (NEW) The composition according to claim 203, wherein said biological system comprises at least one member selected from the group consisting of a virus or a viral component thereof, and a cell or a cellular component thereof. --

-- 205. (NEW) The composition according to claim 204, wherein said cell or component thereof comprises a bacterium or a bacterial component thereof. --

-- 206. (NEW) The composition according to claim 203, wherein said biological system comprises a pathogen or a component thereof. --

-- 207. (NEW) The composition according to claims 201 or 202, wherein said analyte is selected from the group consisting of a nucleic acid and a protein. --

-- 208. (NEW) The composition according to claim 207, wherein said nucleic acid is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 209. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion comprises a low molecular weight organic compound. --

-- 210. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of an antigen and an antibody. --

-- 211. (NEW) The composition according to claim 210, wherein said antibody comprises a polyclonal or a monoclonal antibody. --

-- 212. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of a saccharide and a lectin. --

-- 213. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of a hormone and a receptor therefor. --

-- 214. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of an enzyme, an allosteric effector, an enzyme substrate and an enzyme cofactor. --

-- 215. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of a ligand and a receptor therefor. --

-- 216. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion is selected from the group consisting of a protein and a protein receptor therefor. --

-- 217. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity first portion comprises a nucleic acid. --

-- 218. (NEW) The composition according to claim 217, wherein said nucleic acid comprises an oligo- or polynucleotide. --

-- 219. (NEW) The composition according to claim 218, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 220. (NEW) The composition according to claim 218, wherein said oligo- or polynucleotide is single-stranded or partially double-stranded. --

-- 221. (NEW) The composition according to claim 218, wherein said oligo- or polynucleotide is circular or linear. --

-- 222. (NEW) The composition according to claim 218, wherein said oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 223. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity nucleic acid second portion comprises an oligo- or polynucleotide. --

-- 224. (NEW) The composition according to claim 223, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 225. (NEW) The composition according to claim 223, wherein said oligo- or polynucleotide is single-stranded or partially double-stranded. --

-- 226. (NEW) The composition according to claim 223, wherein said oligo- or polynucleotide is linear or circular. --

-- 227. (NEW) The composition according to claim 223, wherein said oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 228. (NEW) The composition according to claims 201 or 202, wherein said polynucleotide sequence in the molecular bridging entity second portion is derived from a phage selected from the group consisting of a T even phage, a filamentous phage, an M13 phage, or an M13 phage variant. --

-- 229. (NEW) The composition according to claims 201 or 202, wherein said molecular bridging entity second portion comprises a nucleic acid sequence of repeating low complexity. --

-- 230. (NEW) The composition according to claim 229, wherein said nucleic acid sequence of repeating low complexity is selected from the group consisting of a poly G or polydeoxy G, poly GT or polydeoxy GT, poly C or polydeoxy C, poly T or polydeoxy T, poly A or polydeoxy A, poly CA or polydeoxy CA, poly GA or polydeoxy GA, poly GAT or polydeoxy GAT, and poly GTA or polydeoxy GTA. --

-- 231. (NEW) The composition of claim 223, wherein said molecular bridging entity first portion and said molecular bridging entity second portion are incapable of hybridizing to identical oligo- or polynucleotide sequences. --

-- 232. (NEW) The composition according to claims 201 or 202, wherein said signalling entity nucleic acid portion comprises an oligo- or polynucleotide. --

-- 233. (NEW) The composition according to claim 232, wherein said signalling entity oligo- or polynucleotide is selected from the group consisting of an oligo- or polyribonucleotide, and an oligo- or polydeoxyribonucleotide. --

-- 234. (NEW) The composition according to claim 232, wherein said oligo- or polynucleotide comprises a modified oligo- or polynucleotide. --

-- 235. (NEW) The composition according to claims 201 or 202, wherein said signalling entity nucleic acid portion is single-stranded or partially double-stranded. --

-- 236. (NEW) The composition according to claims 201 or 202, wherein said signalling entity nucleic acid portion is linear or circular. --

- 237. (NEW) The composition according to claim 236, wherein said signalling entity nucleic acid portion is a polymer derived from a circular nucleic acid molecule covalently attached to a signal generating portion or a signalling chemical moiety. --
- 238. (NEW) The composition according to claims 201 or 202, wherein said signalling entity nucleic acid portion is derived from a phage selected from the group consisting of a T even phage, a filamentous phage, an M13 phage or an M13 phage variant. --
- 239. (NEW) The composition according to claim 234, wherein said signalling entity modified oligo- or polynucleotide portion comprises a naturally occurring modified oligo- or polynucleotide. --
- 240. (NEW) The composition according to claim 234, wherein said signalling entity modified oligo- or polynucleotide carried a cloned insert. --
- 241. (NEW) The composition according to claims 201 or 202, wherein said signalling entity nucleic acid portion comprises a nucleic acid sequence of repeating low complexity. --
- 242. (NEW) The composition according to claim 241, wherein said nucleic acid sequence of repeating low complexity is selected from the group consisting of a poly G or polydeoxy G, poly GT or polydeoxy GT, poly C or polydeoxy C, poly T or polydeoxy T, poly A or polydeoxy A, poly CA or polydeoxy CA, poly GA or polydeoxy GA, poly GAT or polydeoxy GAT, and poly GTA or polydeoxy GTA. --
- 243. (NEW) The composition according to claims 201 or 202, wherein said signal generating portion is capable of directly providing a detectable signal. --
- 244. (NEW) The composition according to claims 243, wherein said direct signal providing signal generating portion comprises a radioactive compound. --

-- 245. (NEW) The composition according to claim 243, wherein said direct signal providing signal generating portion is selected from the group consisting of a fluorogenic compound, a phosphorescent compound, a chromogenic compound, a chemiluminescent compound and an electron dense compound. --

-- 246. (NEW) The composition according to claim 243, wherein said direct signal providing signal generating portion comprises an enzyme. --

-- 247. (NEW) The composition according to claims 201 or 202, wherein said signal generating portion is indirectly capable of providing a detectable signal. --

-- 248. (NEW) The composition according to claim 247, wherein said indirect signal providing signal generating portion is selected from the group consisting of an antibody, an antigen, a hapten, a receptor, a ligand, and an enzyme. --

-- 249. (NEW) The composition according to claim 247, wherein said indirect signal providing signal generating portion comprises a polynucleotide sequence capable of recognizing a signal-containing moiety. --

-- 250. (NEW) The composition according to claim 247, wherein said indirect signal providing signal generating portion comprises a compound capable of binding to an insoluble phase. --

-- 251. (NEW) The composition according to claim 201 or 202, wherein said signal generating portion is capable of being detected by a member selected from the group consisting of an enzymatic measurement, a fluorescent measurement, a phosphorescent measurement, a chemiluminescent measurement, a calorimetric measurement, a microscopic measurement, an electron density measurement, a radioactive measurement and a binding step on an insoluble phase. --

-- 252. (NEW) The composition according to claims 201 or 202, wherein either the analyte or the molecular bridging entity is immobilized. --

-- 253. (NEW) A composition of matter comprising:

a detectable complex which comprises:

- (a) an analyte having a molecularly recognizable portion thereon;
- (b) a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable analyte portion and a second portion comprising a nucleic acid sequence; and
- (c) a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity polynucleotide second portion, and more than one signal generating portion capable of providing a detectable signal. --

-- 254. (NEW) The composition according to claim 253, wherein the ratio of the signal generating portions to said signalling entity nucleic acid portion is greater than 10. --

-- 255. (NEW) A composition of matter comprising: a detectable complex which comprises:

- (a) an analyte having a molecularly recognizable portion thereon;
- (b) a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable analyte portion, and a second portion comprising more than one nucleic acid sequence; and
- (c) a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity nucleic acid second portion, and a signal generating portion capable of providing a detectable signal. --

-- 256. (NEW) The composition according to claim 255, wherein the ratio of nucleic acid sequences in the molecular bridging entity second portion to the first portion is greater than 10. --

-- 257. (NEW) A composition of matter comprising:

a detectable complex which comprises:

- (a) an analyte having a molecularly recognizable portion thereon;
- (b) a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable analyte portion, and a second portion comprising more than one nucleic acid sequence; and
- (c) a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with the nucleic acid sequences in said bridging entity second portion, and more than one signal generating portion capable of providing a detectable signal. --

-- 258. (NEW) The composition according to claim 257, wherein the ratio of nucleic acid sequences in the molecular bridging entity second portion to the first portion is greater than 10, and the ratio of the signal generating portions to the signalling entity nucleic acid first portion is greater than 10. --

-- 259. (NEW) An article of manufacture comprising:

a molecular bridging entity comprising a first portion capable of recognizing and binding to a molecularly recognizable portion on an analyte, and a second portion comprising one or more nucleic acid sequences; and

a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity second portion nucleic acid sequence or sequences, and one or more signal generating portions, each capable of providing a detectable signal. --

-- 260. (NEW) The article of manufacture according to claim 259, further comprising the analyte. --

-- 261. (NEW) A method of detecting an analyte having a molecularly recognizable portion thereon, comprising:

providing the composition of any of claims 150, 201, 202, 255 or 257;

forming a detectable complex comprising said composition and said analyte; and

detecting said analyte by a signal provided by said signal generating portion or portions present in said detectable complex. --

-- 262. (NEW) The method according to claim 261, characterized in that said forming step comprises contacting said analyte with said bridging entity to form a first complex and thereafter contacting first complex with said signalling entity to form said detectable complex. --

-- 263. (NEW) The method according to claim 261, characterized in that said forming step comprises contacting said bridging entity with said signalling entity to form a first complex and thereafter contacting said first complex with said analyte to form said detectable complex. --

-- 264. (NEW) The method according to claim 261, wherein detecting is directly carried out by means of a detectable signal provided by said signal generating portion. --

-- 265. (NEW) The method according to claim 264, wherein said detecting step the direct detectable signal provided by said signal generating portion comprises a radioactive compound. --

-- 266. (NEW) The method according to claim 264, wherein said detecting step the direct detectable signal is provided by a member selected from the group consisting of a fluorogenic compound, a phosphorescent compound, a chromogenic compound, a chemiluminescent compound and an electron dense compound. --

-- 267. (NEW) The method according to claim 264, wherein said detecting step the signal generating portion comprises an enzyme. --

-- 268. (NEW) The method according to claim 261, wherein detecting is indirectly carried out by means of a detectable signal provided by said signal generating portion. --

-- 269. (NEW) The method according to claim 268, wherein said detecting step the signal generating portion is selected from the group consisting of an antibody, an antigen, a hapten, a receptor, a ligand and an enzyme. --

-- 270. (NEW) The method according to claim 268, wherein said detecting step the signal generating portion comprises a polynucleotide sequence capable of recognizing a signal-containing moiety. --

-- 271. (NEW) The method according to claim 268, wherein said detecting step the signal generating portion comprises a compound capable of binding to an insoluble phase. --

-- 272. (NEW) The method according to claim 261, wherein said signal generating portion is capable of being detected by a member selected from the group consisting of an enzymatic measurement, a fluorescent measurement, a phosphorescent measurement, a chemiluminescent measurement, a calorimetric measurement, a microscopic measurement, an electron density measurement, a radioactive measurement and a binding step on an insoluble phase. --

-- 273. (NEW) The method according to claim 261, wherein the molecular bridging entity or the analyte of said detectable complex is immobilized. --

-- 274. (NEW) A method of detecting in a biological system an analyte having a molecularly recognizable portion thereon, comprising:

providing a composition comprising:

a molecular bridging entity comprising a first portion capable of recognizing and binding to a molecularly recognizable portion on an analyte, and a second portion comprising one or more nucleic acid sequences; and

a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity second portion nucleic acid sequence or sequences, and one or more signal generating portions, each capable of providing a detectable signal;

forming a detectable complex comprising said composition and said analyte; and

detecting said analyte by a signal provided by said signal generating portion or portions present in said detectable complex. --

-- 275. (NEW) A kit for the detection in a sample of an analyte having a molecularly recognizable portion thereon, comprising as components thereof:

(i) a container carrying a molecular bridging entity comprising a first portion capable of recognizing and binding to said molecularly recognizable portion on said analyte, and a second portion comprising one or more nucleic acid sequences; and

(ii) a container carrying a signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity second portion nucleic acid sequence or sequences, and one or more signal generating portions, each capable of providing a detectable signal. --

-- 276. (NEW) The kit according to claim 275, further comprising means to detect a signal from said signal generating portion. --

-- 277. (NEW) The kit according to claim 275, wherein the ratio of signal generating portions to nucleic acid portions in the signalling entity is greater than 10. --

-- 278. (NEW) The kit according to claim 275, wherein the ratio of nucleic acid sequences in said molecular bridging entity second portion to the first portion is greater than 10. --

-- 279. (NEW) The kit according to claim 275, wherein the ratio of nucleic acid sequences in said molecular bridging entity second portion to the first portion is greater than 10, and the ratio of signalling chemical moieties to nucleic acid portions in the signalling entity is greater than 10. --

-- 280. (NEW) The kit according to claim 275, wherein said signal generating portion is carried in a separate container (iii) from the container (ii) carrying the signalling entity comprising a nucleic acid portion capable of annealing to and forming a polynucleotide hybrid with said bridging entity nucleic acid second portion. --

-- 281. (NEW) The kit according to claim 275, wherein said analyte comprises a biological system. --

-- 282. (NEW) The kit according to claim 275, wherein the molecular bridging entity is immobilized. --

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